

IN THE CLAIMS:

Claim 13 has been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-12. Canceled

13. (Currently Amended) A kit for sequencing one or more DNA regions from a genomic DNA sample or a microorganism, said kit consisting of, in packaged combination, a single [tube] reaction vessel containing a mixture of region-specific sequencing reagents sufficient for each DNA region to be sequenced and optionally in said mixture one or more non-region specific sequencing reagents, wherein said region-specific sequencing reagents comprise region-specific primers, deoxynucleotide triphosphate feedstocks, at least one chain terminating dideoxynucleotide triphosphate and a thermally stable polymerase enzyme capable of incorporating dideoxynucleotides into an extending nucleic acid polymer.

14. (Previously Presented) The kit of claim 13, wherein the kit includes, as region-specific reagents, a pair of primers which bind to the sense and antisense strands and flank one of the DNA regions within the genomic or microorganisms DNA.

15. (Previously Amended) The kit of claim 14, wherein the kit is for sequencing one or more DNA regions from a genomic sample, and wherein the pair of primers bind to the sense and antisense strands of the genomic sample.

16. (Previously Amended) The kit of claim 14, wherein the kit is for sequencing one or more DNA regions from a selected microorganism and wherein the pair of primers bind to the sense and antisense strands of DNA from the microorganism.

17. (Previously Presented) The kit of claim 13, wherein the kit includes as non-region specific reagents four deoxynucleotide triphosphates and at least one dideoxynucleotide triphosphate.

18. (Previously Presented) The kit of claim 17, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:50 to 1:1000.

19. (Previously Presented) The kit of claim 17, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:100 to 1:500.

20. (Previously Presented) The kit of claim 17, wherein the kit includes as a non-specific reagent a polymerase enzyme which incorporates dideoxynucleotides into an extending nucleic acid polymer at a rate which is no less than 0.4 times the rate of incorporation of deoxynucleotides.

21. (Previously Presented) The kit of claim 20, wherein the kit includes, as a region-specific reagent, a pair of primers which bind to the sense and antisense strands and flank one of the plurality of DNA regions within the genomic DNA.

22. (Previously Presented) The kit of claim 20, wherein the kit includes as non-region specific reagents four deoxynucleotide triphosphates and at least one dideoxynucleotide triphosphate.

23. (Previously Presented) The kit of claim 22, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:50 to 1:1000.

24. (Previously Presented) The kit of claim 22, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:100 to 1:500.

25. (Previously Presented) The kit of claim 13, wherein the kit contains a plurality of tubes of region-specific reagents for sequencing a plurality of DNA regions.

26. (Previously Presented) The kit of claim 25, wherein the kit includes, as region-specific reagents, a pair of primers which bind to the sense and antisense strands and flank one of the plurality of DNA regions within the genomic or microorganism DNA.

27. (Previously Amended) The kit of claim 26, wherein the kit is for sequencing one or more DNA regions from a genomic sample, and wherein the pair of primers bind to the sense and antisense strands of the genomic sample.

28. (Previously Amended) The kit of claim 26, wherein the kit is for sequencing one or more DNA regions from a selected microorganism and wherein the pair of primers bind to the sense and antisense strands of DNA from the microorganism.

29. (Previously Presented) The kit of claim 25, wherein the kit includes as non-region specific reagents four deoxynucleotide triphosphates and at least one dideoxynucleotide triphosphate.

30. (Previously Presented) The kit of claim 29, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:50 to 1:1000.

31. (Previously Presented) The kit of claim 29, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:100 to 1:500.

32. (Previously Presented) The kit of claim 29, wherein the kit includes as a non-specific reagent a polymerase enzyme which incorporates deoxynucleotides into an extending nucleic acid polymer at a rate which is no less than 0.4 times the rate of incorporation of deoxynucleotides.

33. (Previously Presented) The kit of claim 32, wherein the kit includes, as a region-specific reagent, a pair of primers which bind to the sense and antisense strands and flank one of the plurality of DNA regions within the genomic DNA.

34. (Previously Presented) The kit of claim 32, wherein the kit includes as non-region specific reagents four deoxynucleotide triphosphates and at least one dideoxynucleotide triphosphate.

35. (Previously Presented) The kit of claim 34, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:50 to 1:1000.

36. (Previously Presented) The kit of claim 34, wherein the dideoxynucleotide triphosphate is present in a mole ratio to the corresponding deoxynucleotide triphosphate of from 1:100 to 1:500.